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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,215	02/17/2000	Shimada Naohiro	P/126-182	7056

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EXAMINER

PRIETO, BEATRIZ

ART UNIT PAPER NUMBER

2142

DATE MAILED: 04/23/2003

60

Please find below and/or attached an Office communication concerning this application or proceeding.

224

Office Action Summary

Application No.

09/506,215

Applicant(s)

NAOHIRO, SHIMADA

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 3-14 and 17-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 & 4-5. 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to election requirement field 02/05/03, claims 1-28 remain pending, claims 3-14 and 17-28 are withdrawn from consideration and claims 1-2 and 15-16 are hereby presented for examination.

2. Applicant traverses election/restriction requirement filed 12/31/02, arguments were considered and noted. In regards to applicant's request for a clarification of the notation used on previous action, in this case for example Groups I/II, (claims 1-2, 15-16)/(claims 8-9, 22-23) respectively, are drawn to a node comprising a first, second, and third layers, a first layer for: transmitting the PACKET/CELL to said third layer through said second layer. Therefore Group one contains the claims, which refer to a PACKET, and Group two contains the claims, which refer to the CELL.

As to the properness of the restriction, it is restated that in this case, for example invention II (claims 8-19 and 22-23), has separate utility such as it is usable in a method wherein a first layer transmits the cell to said third layer through said second layer, when said first layer judges that the cell is to be dropped at said node, and transmitting the cell to said next node by making the cell cut through said first layer, when said first layer judges that the cell is to be hopped to said next node. Further the features in invention II lack the features existing in invention I, therefore requiring separate searches. See MPEP 806.05(d).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo U.S. Patent No. 6,256,326 in view of Ellis et. al. (Ellis) in view of 6,256,292 U.S. Patent No. 6,256,292.

Regarding claim 1, Kudo teaches claimed invention substantially as claimed, teaching a node(s) (4 and 6

of Fig. 9, col 6/lines 6-21) comprising layers (Fig. 10) including: a first layer (PPI: col 7/lines 33-36), a ^{Fig 9 40, 60, 45} ^{HPT → PPI of Fig 6} ^{terminal node 6/20-25} second layer ^{41, 41} 44 (col 8/lines 4-15) and a third layer ^{Fig 6, MSA ~ 2ND LAYER} 42 (RST: col 7/line 42-45);

a layer at interfaces (40, 60 of Figs. 9-10 and 43 of Fig. 12) (first layer) (PDH Physical Interface: col 7/lines 33-36 and ^{42, 62} SDH Physical Interface: col 7/lines 42-48) configured to perform mapping process ^{8/11-24} (col 6/lines 60-col 7/line 3, i.e. mapping and or demapping, mapping by interface 40 col 7/lines 11-13);

said first layer (43 of Fig. 12) determines where the data packet is destined, it identifies and extracts the path information from the received data packet and provides the path identifier to the second layer (col 6/lines 39-45), ^{19/42-50} the physical interface layer 43 same as 62 extracts byte information forming the POH to establish a data link with the destined node (col 6/lines 42-45); the terminal physical interface 45 same as 60 configured to identify the nodes it is connected to (col 8/lines 17-22); the byte information provided to the first layer interface is set by the first layer to make a transmission to the next node or adjacent node (col 22/lines 17-26);

transmitting data (packet) to said third layer (45) through said second layer (44) when determine that the packet is to be forwarded to another node (Fig. 12, marked as A, col 8/lines 4-15, 33-42);

although prior art teaches determining whether the packet is to be hopped to a next node, it does not explicitly teach, where it determines is the packet is to at said node

Ellis teaches a system method related to transmission apparatuses and method in a communication network, wherein that line terminal equipment (LTE) (e.g. add-drop multiplexer ADM) operate in the physical layer (first layer, path and/or line sublayer) (Fig. 1) configured with means for accessing accesses signals that need to be dropped or inserted at that site, the rest of the traffic continuing straight through (col 7/lines 39-48, Fig. 2B, element 350).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include the teaches of Ellis for judging at the first layer whether the packet is to be dropped to said node or hopped to a next node, motivation would be utilize the physical layer of the Sonet model including transmission path, multiplex section and regeneration sections as suggest by Kudo, allowing a straight path through between two consecutive line terminal equipment and taught by Ellis.

Regarding claim 2, the first layer transmits (Kudo: Fig. 12, marked as A, col 8/lines 4-15, 33-42, Ellis: col 7/lines 21-25, 64-65).

Regarding claims 15-16, these claims are the method claims associated with claims 1-2, same rationale of rejection is applicable.

Related U.S. Patents:

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; pertinence is presented in accordance with to MPEP§ 707.05. Copies of documents cited will be provided as set forth in MPEP§ 707.05(a):

U.S. Patent No. 6,169,754 (Jan. 2001);

Sugawara et. al. teaches a transmission apparatus which has a function of passing through an overhead instead of processing the overhead standardized by SDH and SONET (col 3/lines 3-6); for selectively cross-connecting a received tributary overhead and transmitting the cross-connected overhead to a far-end transmission apparatus (col 3/lines 18-21); Fig. 5, the transmission apparatus including a multiplexer comprises sets of tributary signal transmission/reception units 10, 11, a main signal switch unit 100, a overhead processing units 300, the transmission apparatus is configured for cross-connecting overheads tributary multiplexed signals and the high speed multiplexed signal and for passing the crossconnected overheads through the multiplexer itself (col 8/lines 32-51). SOH (section overhead) termination unit performing the reception of a tributary signal and the processing for a received section overhead and for extracting a portion of section overhead bytes which is passed there through and transmitted to far end multiplexer; a space switch unit 200, 210 for cross connecting collected overheads in accordance with predetermined rules in order to transmit the overheads to far-end multiplexer; and an overhead demultiplex unit 120, 140 for distributing the crossconnected overheads to the LOH insertion units or to the SOH insertion units of the respective multiplexed signal transmission/reception units. Therefore the transmission apparatus passes there through certain tributary overheads, which have been previously determined in a transmission system using the multiplexers, and processes (terminates/adds) the overheads, so as to enable desired multiplexers to use the overheads there between, at the reception layers (col 8/line 52-col 9/line 28).

U.S. Patent No. 5,805,568 (Sept. 1998):

Shinbashi teaches determining whether the packet is to be dropped at said node or passed through the next node at the reception layer, the packet is transmitted through a second layer according to said determination, wherein the electric signal produced by mapping the fixed length cell passes through the cross-connect unit, and is dropped, passes through, or is added at the tributary interface unit. To this end, the tributary interface unit owns the VC table for registering therein the virtual channel (VC) used by the low-ordered communication network in order to communicate the fixed length cell through the virtual channel. Then, the tributary interface unit drops, or passes through the fixed length cell received with reference to this VC table (col 2/lines 16-28).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
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or Faxed to:

(703) 746-7239, for Official communications and entry


Or:


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Or Telephone:

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC
2100".


B. Prieto
TC 2100
Patent Examiner
April 15, 2003


MARK R. POWELL
SUPERVISORY PATENT EXAMINER
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